10/776,840

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	. 2	("3887379").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/12/20 14:08
S2	2	("6004536").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/12/20 14:09
S3	2	("6077585").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/12/20 14:10
S4	. 36	dye near1 azide\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 14:10
S5	45	dye\$1 near1 azide\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 14:25
S6	11	S5 and oxygen	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 14:37
S7	3	S6 and phototherapy	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 14:37
S8	78	phototherapy and dye\$1 and azide	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 14:47

EAST Search History

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S9	385	azide\$1 and phthalocyanine\$1 and porphyrin\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 14:48
S10	22	azide\$1 same phthalocyanine\$1 same porphyrin\$1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 14:49
S11	7	S10 and (phototherapy or therapy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 14:59
S12	2	("6858704").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/12/20 15:00
S13		("6485704").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/12/20 15:02
S14	0	("(azide\$1orperoxide\$1ordisulfide\$1 orsulfenate\$1)same(phthalocyanine \$1orporphyrin\$1)").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2006/12/20 15:03
S15	1854	(azide\$1 or peroxide\$1 or disulfide\$1 or sulfenate\$1) same (phthalocyanine\$1 or porphyrin\$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 15:05
S16	186	S15 and (therapy or tissue adj damage or phototherapy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 15:05
S17	18	S15 same (therapy or tissue adj damage or phototherapy)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/12/20 15:05

10/776,840

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                 CAS REGISTRY(SM) no longer includes Concord 3D coordinates
NEWS 10
         SEP 25
                 CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine
         SEP 28
NEWS 11
                 CEABA-VTB classification code fields reloaded with new
                 classification scheme
NEWS 12
         OCT 19
                 LOGOFF HOLD duration extended to 120 minutes
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         OCT 19
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                 Option to turn off MARPAT highlighting enhancements available
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                 has been enhanced and reloaded
                 CHEMLIST enhanced with new search and display field
NEWS 17
         OCT 30
         NOV 03
                 JAPIO enhanced with IPC 8 features and functionality
NEWS 18
NEWS 19
         NOV 10
                 CA/CAplus F-Term thesaurus enhanced
NEWS 20
        NOV 10
                 STN Express with Discover! free maintenance release Version
                 8.01c now available
NEWS 21
         NOV 20
                 CAS Registry Number crossover limit increased to 300,000 in
                 additional databases
NEWS 22
         NOV 20
                 CA/CAplus to MARPAT accession number crossover limit increased
                 to 50,000
NEWS 23
         DEC 01
                 CAS REGISTRY updated with new ambiguity codes
NEWS 24
         DEC 11
                 CAS REGISTRY chemical nomenclature enhanced
NEWS 25
         DEC 14
                 WPIDS/WPINDEX/WPIX manual codes updated
NEWS 26
         DEC 14
                 GBFULL and FRFULL enhanced with IPC 8 features and
                 functionality
NEWS 27
         DEC 18
                 CA/CAplus pre-1967 chemical substance index entries enhanced
                 with preparation role
NEWS 28
         DEC 18
                 CA/CAplus patent kind codes updated
NEWS 29
                 MARPAT to CA/CAplus accession number crossover limit increased
         DEC 18
                 to 50,000
NEWS 30
         DEC 18
                 MEDLINE updated in preparation for 2007 reload
NEWS EXPRESS
              NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
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=> s azide and phthalocyanine and porphyrin

42506 AZIDE

8872 AZIDES

45002 AZIDE

(AZIDE OR AZIDES)

35760 PHTHALOCYANINE

6826 PHTHALOCYANINES

36492 PHTHALOCYANINE

(PHTHALOCYANINE OR PHTHALOCYANINES)

36222 PORPHYRIN

25130 PORPHYRINS

42568 PORPHYRIN

(PORPHYRIN OR PORPHYRINS)

L1 9 AZIDE AND PHTHALOCYANINE AND PORPHYRIN

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L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:652430 CAPLUS

DOCUMENT NUMBER: 141:179566

TITLE: Compounds for dual photodiagnosis and therapy

INVENTOR(S): Rajagopalan, Raghavan; Achilefu, Samuel I.; Bugaj,
Joseph E.; Dorshow, Richard B.; Periasamy, Muthunadar

Р.

PATENT ASSIGNEE(S): Mallinckrodt Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S.

Ser. No. 898,885.

CODEN: USXXCO

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.			KIN	D	DATE			APPL	CAT	ION 1	NO.		D	ATE	
US 200 US 200 US 200	30171	64		A1 A1 A1		2004 2003 2004	0123		US 2 US 2 US 2	001-	8988	85		2	0031 0010 0040	703
AU 200 CA 254	42821			A1 A1		2005 2005	0428		AU 2 CA 2	004-	2821	31		. 2	0041 0041	007
WO 200 WO 200				A2 A3		2005 2005			WO 2	004-1	US32	859		2	0041	007
	GE, LK, NO, TJ, Y: BW, AZ, EE,	CO, GH, LR, NZ, TM, GH, BY, ES,	CR, GM, LS, OM, TN, GM, KG,	CU, HR, LT, PG, TR, KE, KZ, FR,	CZ, HU, LU, PH, TT, LS, MD, GB,	DE, ID, LV, PL, TZ, MW, RU, GR,	DK, IL, MA, PT, UA, MZ, TJ, HU,	DM, IN, MD, RO, UG, NA, TM, IE,	DZ, IS, MG, RU, US,	EC, JP, MK, SC, UZ, SL, BE, LU,	EE, KE, MN, SD, VC, SZ, BG, MC,	EG, KG, MW, SE, VN, TZ, CH, NL,	ES, KP, MX, SG, YU, UG, CY, PL,	FI, KR, MZ, SK, ZA, ZM, CZ, PT,	GB, KZ, NA, SL, ZM, ZW, DE, RO,	GD, LC, NI, SY, ZW AM, DK, SE,
EP 168	SN, 0472 AT,	TD,	TG CH,	A2 DE,	DK,	2006 ES,	0719 FR,	GB,	EP 2	004-	7942 LI,	69 LU,		2	0041	007
PRIORITY AF	PLN.	INFO	.:		•			,	US 20 US 20 WO 20	001- 003- 004-	8988 6851 US32	85 72 859	Ī	A 2	0031 0041	014 007

AB The invention discloses compds. and compns. for dual phototherapy and combined therapy and diagnosis of tumors and other lesions. The compds. have a Dye that, when photoactivated, operates via Type I and/or Type II mechanisms. Other Dye or azide components may operate by the same or different mechanisms. Selection of particular components in a compound, and formulation of the compound(s) in a composition permit different

activation wavelengths to be used for different therapies. A targeting moiety may be added to the compound or composition so that the Dye locates at a particular site, such as a hormone-sensitive tumor, for diagnosis and/or treatment. The compds. and compns. may be incorporated within liposomes.

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2003:42026 CAPLUS

DOCUMENT NUMBER:

138:78436

TITLE:

Dye-azide compounds for dual phototherapy

INVENTOR(S):

Rajagopalan, Raghavan; Achilefu, Samuel I.; Bugaj,

Joseph E.; Dorshow, Richard B.

PATENT ASSIGNEE(S):

Mallinckrodt Inc., USA PCT Int. Appl., 40 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	CENT 1	NO.			KIN	D	DATE		• .	APPL	ICAT	ION 1	NO.		D	ATE	
		2003				A2 A3		2003 2004			WO 2	002-	US19	187		2	0020	618
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			IE,	SI,	LT,	LV,	ΓI,	RO,	MK,	CY,	AL,	TR						
	JΡ	2005	5033	64		T	•	2005	0203		JP 2	003-	50983	36		2	0020	618
	US	2004	16143	30				2004	0819	1	US 2	004-	7768	40		.21	0040	211
PRIO		APP:									US 2						0010	
											WO 2					v 2	0020	618

OTHER SOURCE(S): MARPAT 138:78436

The present invention discloses dye-azide derivs. and their bioconjugates for dual phototherapy of tumors and other lesions. compds. of the present invention may contain either a mixture of Type 1 (direct energy or electron transfer from photosensitizer to cellular components) and Type 2 (singlet oxygen-mediated therapeutic action) agents or a single entity that integrates both units in the same mols. The compds. are designed to produce both Type 1 and Type 2 phototherapeutic effect at once using dual wavelength light source that will produce singlet oxygen and nitrene at the lesion of interest. This is accomplished using 3 types of formulation: homogenous mixts. of Type 1 and Type 2 agents alone, heterogeneous mixts. of Type 1 and Type 2 agents, or a single mol. entity containing both Type 1 and Type 2 functionalities. Suggested as single mol. entities are dyes (cyanines, porphyrins , phthalocyanines, etc.) conjugated to both organic azides and to biomol. targeting agents such as receptor (somatostatin, steroid, carbohydrate, etc.)-binding mols.

L2 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:789050 CAPLUS

DOCUMENT NUMBER:

130:20543

TITLE:

Photodynamic and sonodynamic therapy and

agents and system for use therefor

INVENTOR(S):

Iger, Yoni

PATENT ASSIGNEE(S):

Technion Research and Development Foundation Ltd.,

Israel

SOURCE:

PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	CENT 1	NO.			KIN	D	DATE				ICAT:				D.	ATE	•
	WO	9852	610			A1	_	1998	1126							1	9980	520
		W:	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	ΗU,	ΙĎ,	IL,	IS,	JP,	KE,	KG,
			KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,
			NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
			UA,	UG,	"US,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	ΒY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
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			FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
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	EΡ	9830															9980	
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	FΙ														
PRIOF	RITY	APP:	LN.	INFO	.:							997-:			-		9970!	522
3 D												998-:					9980!	

The present invention provides a method and system for destruction of biol. tissues, such as tumors, by various types of irradiation such as ultrasound or light using a helper agent or combination of agents, optionally together with an agent capable of being sensitized by the irradiation The helper agent may release singlet oxygen, oxidizing compds., free radicals or can be an agent capable of undergoing an exothermal reaction. The present invention further provides a method for terminating the destructive activity of various energy-sensitizable agents. Several examples are provided on reduction of tryptophan fluorescence in the presence of photosensitizable compds. TPPS2, TPPS4 and AlPcS3 after ultrasound irradiation in the presence or absence of oxygen.

REFERENCE COUNT:

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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             6 L1 NOT L2
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ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

133:259194

14

ACCESSION NUMBER: 2000:530976 CAPLUS

DOCUMENT NUMBER:

TITLE:

Photobleaching studies on azabenzoporphyrins and

related systems: a comparison of the photobleaching of the zinc(II) complexes of the tetrabenzoporphyrin,

5-azadibenzo(b,g)porphyrin and

phthalocyanine systems

AUTHOR(S):

Bonnett, Raymond; Martinez, Gabriel

CORPORATE SOURCE: Department of Chemistry, Queen Mary and Westfield

College, London, El 4NS, UK

SOURCE: Journal of Porphyrins and Phthalocyanines (2000),

4(5), 544-550

CODEN: JPPHFZ; ISSN: 1088-4246

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

The kinetics of photobleaching of zinc(II) tetra-tert-

butyltetrabenzoporphyrin (I), zinc(II) 13, 17-diethyl-12,18-dimethyl-5-

azadibenzo[b,g]porphyrin 2 and zinc(II) tetra-tertbutylphthalocyanine (III) were studied. In methanol containing ca 0.1% pyridine, complex I underwent photoaggregation, II was relatively photostable, while III underwent a smooth true photobleaching process with loss of intensity across the visible region. Where appropriate, apparent first-order rate consts. for the photodiminution of the α -band in the spectra were reported, and the effects of solvent variation and of additives were measured. It has not been possible to provide an overall rationalization of the solvent effects, but the effects of additives support the view that the photooxidative processes involve singlet oxygen. Expts. with potassium superoxide did not support superoxide involvement. Preparative expts with I and III were performed in methanol. In the case of I a large recovery of the starting material was observed, indicating that the photoaggregation did not involve the formation of new covalent bonds. In the case of III gives rise to at least five products (besides the starting material). Two of these, isolated in low yields (<5%), are butylphthalonitrile, and the expected oxidative product,

identified as a fragmentation (depolymn.) product, 4-tert-

4-tert-butylphthalimide. The results are discussed and conclusions drawn. REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:613433 CAPLUS

DOCUMENT NUMBER: 131:336863

TITLE: Approaches to the stepwise synthesis of

benzoporphyrins and phthalocyanines. Part 2: synthesis of a 5-azadibenzo[b,q]porphyrin

from benzopyrromethene intermediates

AUTHOR(S): ' Bonnett, Raymond; Okolo, Kawulia

Department of Chemistry, Queen Mary and Westfield College, London, El 4NS, UK CORPORATE SOURCE:

SOURCE: Journal of Porphyrins and Phthalocyanines (1999),

3(6/7), 530-536

CODEN: JPPHFZ; ISSN: 1088-4246

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

An azadibenzoporphyrin, 13,17-diethyl-12,18-dimethyl-5-azadibenzo[b,g] porphyrin, is prepared by a 2 + 2 synthesis from a

1-bromobenzopyrromethene precursor by treatment with sodium azide at 140°C in solvent. Yields depend on solvent, 35% being obtained in quinoline and 84% in DMF. Treatment of 1-bromo-8-ethyl-7,9dimethylbenzopyrromethene hydrobromide with sodium azide at

60°C in DMF gives 8-ethyl-7,9-dimethyltetrazolo[1,5-

i]benzopyrromethene which appears to be, or to lead to, an intermediate in

the macrocyclization at the higher temperature

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:171824 CAPLUS

DOCUMENT NUMBER: 128:258678

TITLE: Azide promotion of alkane oxidations

catalyzed by metal complexes in solution

AUTHOR(S): Lyons, James E.; Ellis, Jr., Paul E.; Shaikh, Shahid

N.

CORPORATE SOURCE: Sun Company, Research and Development Department,

Marcus Hook, PA, 19061, USA

Inorganica Chimica Acta (1998), 270(1,2), 162-168 SOURCE:

CODEN: ICHAA3; ISSN: 0020-1693

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal LANGUAGE: English

The oxidation of light alkanes catalyzed by metal complexes in solution is promoted by Group 1 metal azides. Yields of oxygenated reaction products are greatly enhanced when catalytic amts. of azides are added to the reaction mixture The addition of sodium azide to oxidation catalyzed by transition metal acetylacetonates, heteropolyacids, polyoxometallates, phthalocyanines, bis-

(pyridylimino)isoindolines, porphyrins and Schiff bases

significantly enhances the rate of low-temperature catalytic oxidation reactions in

the liquid phase. Earlier work showed that Cr(III), Mn(III), Fe(III) and Co(III) complexes of electron-deficient macrocyclic complexes exhibited remarkable catalytic activity for oxidizing light alkanes. Such complexes bearing axial azide ligands were far more active than their

axial chloride or acetate counterparts.

REFERENCE COUNT: THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS 26 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:406914 CAPLUS

DOCUMENT NUMBER: 127:146217

TITLE:

Remarkable functional aspects of myoglobin induced by

diazaheme prosthetic group

AUTHOR(S): Neya, Saburo; Hori, Hiroshi; Imai, Kiyohiro;

Kawamura-Konishi, Yasuko; Suzuki, Haruo; Shiro, Yoshitsugu; Iizuka, Tetsutaro; Funasaki, Noriaki

CORPORATE SOURCE: Department of Physical Chemistry, Kyoto Pharmaceutical

University, Kyoto, 607, Japan

Journal of Biochemistry (Tokyo) (1997), 121(4), SOURCE:

654-660

CODEN: JOBIAO; ISSN: 0021-924X Japanese Biochemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

PUBLISHER:

The iron complex of β , δ -diazamesoporphyrin III, a mol. hybrid of porphyrin and phthalocyanine, was incorporated into apomyoglobin to investigate novel biol. aspects of myoglobin. reconstituted ferric protein forms an internal hemichrome with the iron-bound distal histidine. The reduced ferrous protein has extraordinarily high affinities for O2 and CO. The ferrous myoglobin is capable of strong binding with pyridine, imidazole, cyanide, and azide, and reacts moderately with ammonia. The NO complex exhibited 5-coordinate to 6-coordinate transition over 150 min. instability of 5-coordinate NO heme is consistent with a high affinity of imidazole to the ferrous heme. The kinetic analyses of the ferrous derivs. suggest the importance of the π orbitals in neutral ligands as well as the neg. charges in anionic ligands. A high affinity of imidazole to ferrous diazaheme accounts for the internal hemichrome formation in ferrous myoglobin containing phthalocyanines.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

1993:461595 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 119:61595

TITLE: First example of a mixed-ligand bimetallic (Fe-Fe)

N-bridged dimer: (µ-nitrido)[((tetraphenylporphyrin

ato) iron) (phthalocyaninato) iron]

AUTHOR(S): Ercolani, C.; Hewage, S.; Heucher, R.; Rossi, G.

CORPORATE SOURCE: Dip. Chim., Univ. Roma "La Sapienza", Rome, Italy

SOURCE: Inorganic Chemistry (1993), 32(13), 2975-7

CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal LANGUAGE: English

AB (TPP) FeNFePc (TPPH2 = tetraphenylporphyrin; PcH2 = phthalocyanine
) was prepared and characterized by elemental anal., TGA, magnetic
susceptibility, and spectral (IR, ESR, Moessbauer) methods. The Fe-N-Fe
moiety is linear and the unpaired electron is essentially localized on the
Fe-N-Fe bond system with significant N atom character.

L3 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1992:233757 CAPLUS

DOCUMENT NUMBER: 116:233757

TITLE: Fluorophore- polyoxyhydrocarbyl moiety conjugates as

markers for fluorescence immunoassays and other

applications, and preparation of relevant

phthalocyanine and porphyrin

derivatives

INVENTOR(S): Dandliker, Walter B.; Hsu, Mao Lin

PATENT ASSIGNEE(S): Diatron Corp., USA SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

PATENT NO	•	KIND	DATE	APPLICATION NO.	DATE
WO 911800	 7	A1	19911128	WO 1991-US3426	19910515
W: C	A, FI, JP,	NO			
RW: A	T, BE, CH,	DE, DK	, ES, FR,	GB, GR, IT, LU, NL,	SE
CA 208293	4	A1	19911116	CA 1991-2082934	19910515
CA 208293	4	С	20030805		
EP 528991		A1	19930303	EP 1991-911322	19910515
EP 528991		B1	20010926		
R: A	T, BE, CH,	DE, DK	ES, FR,	GB, GR, IT, LI, LU,	NL, SE
JP 055075	18	T	19931028	JP 1991-510827	19910515
AT 206124	•	T	20011015	AT 1991-911322	19910515
ES 216404	3	Т3	20020216	ES 1991-911322	19910515
PRIORITY APPLN	. INFO.:			US 1990-524212	A 19900515
				WO 1991-US3426	W 19910515

AB The title fluorescent dyes are free of aggregation and serum binding and are suitable for e.g. fluorescence immunoassays. Thus, a digoxin conjugate of phthalocyanine was prepared from a sulfonated phthalocyanine β -alanine derivative (preparation given) and 3-amino digoxigin. The conjugate was further reacted with PEG Phenol 750. In a test for binding activity to anti-digoxin antibody monitored by transient-state polarized fluorescence, a trace amount of the phthalocyanine-digoxin-PEG Phenol conjugate was dissolved in saline-azide-phosphate buffer containing human serum and antibody. A change of 0.056 in polarization was observed over that in the control with no antibody. Preparation of a variety of porphyrin derivs. is included.

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=> s nitrene and azo-dye
2341 NITRENE
892 NITRENES
2639 NITRENE
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(NITRENE OR NITRENES)

76505 AZO 25 AZOS 76512 AZO

(AZO OR AZOS)

260938 DYE

216160 DYES 341790 DYE

(DYE OR DYES)

38310 AZO-DYE

(AZO(W)DYE)

L4 10 NITRENE AND AZO-DYE

=> s 14 and therapy

300345 THERAPY

26193 THERAPIES

314443 THERAPY

(THERAPY OR THERAPIES)

L5 1 L4 AND THERAPY

=> d l1 ibib abs hitstr tot

L1 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:652430 CAPLUS

DOCUMENT NUMBER:

141:179566

TITLE:

Compounds for dual photodiagnosis and therapy

INVENTOR(S):

Rajagopalan, Raghavan; Achilefu, Samuel I.; Bugaj,

Joseph E.; Dorshow, Richard B.; Periasamy, Muthunadar

Р.

PATENT ASSIGNEE(S):

Mallinckrodt Inc., USA

SOURCE:

U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S.

Ser. No. 898,885.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	ENT	NO.			KIN	D	DATE		(,	APP	LICAT	ION I	NO.		D	ATE	
	US	2004	1567	83		A1	_	2004	0812		US 2	2003-	6851°	72		2	0031	014
	US	2003	0171	64		A1		2003	0123		us 2	2001-	8988	85		2	0010	703
	US	2004	1614	30		A 1		2004	0819		US 2	2004-	7768	40			00402	
	'AU	2004	2821	31		A1		2005	0428	•	AU 2	2004-	2821	31		2	0041	007
		2542				A1		2005				2004-				_		
		2005		28		A2		2005				2004-					0041	
		2005				A3		2005			.,					_	5011	007
		W:								BA.	BB.	, BG,	BR.	RW.	BY.	B7.	CA.	CH.
												, EC,						
												, JP,						
												, MK,						
												, SC,						
												, UZ,						
		DW.																
		L/AA :										, SL,						
												, BE,						
												LU,						
						BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
			•	TD,														
	EP	1680										2004-						
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	, IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	, HU,	PL,	SK				
PRIO	RITY	APP	LN.	INFO	.:					1	US 2	2001-	8988	85	7	A2 20	0010	703
										1	US 2	2003-	6851	72	1	A 20	0031	014
										1	WO 2	2004-1	JS328	359	. 1	w 20	0041	007

AB The invention discloses compds. and compns. for dual phototherapy and combined therapy and diagnosis of tumors and other lesions. The compds. have a Dye that, when photoactivated, operates via Type I and/or Type II mechanisms. Other Dye or azide components may operate by the same or different mechanisms. Selection of particular components in a

compound, and formulation of the compound(s) in a composition permit different activation wavelengths to be used for different therapies. A targeting moiety may be added to the compound or composition so that the Dye locates at a particular site, such as a hormone-sensitive tumor, for diagnosis and/or treatment. The compds. and compns. may be incorporated within liposomes.

L1 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:42026 CAPLUS

DOCUMENT NUMBER: 138:78436

TITLE: Dye-azide compounds for dual phototherapy

INVENTOR(S): Rajagopalan, Raghavan; Achilefu, Samuel I.; Bugaj,

Joseph E.; Dorshow, Richard B.

PATENT ASSIGNEE(S): Mallinckrodt Inc., USA SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PAT	CENT	NO.			KIN	D	DATE			APPL	ICAT:	ION I	NO.		D	ATE	
		2003									WO 2	002-	US19	 187		2	0020	618
	WO	2003																
		W:	ΑĖ,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			co,	CR,	CU,	ÇZ,	DE,	DK,	DM,	DZ,	EC,	ĘΕ,	ES,	FI,	GB,	GD,	GE,	GH,
								IN,										
								MD,										
								SE,										
								YU,				•	•			,		,
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD.	SL,	SZ,	TZ.	UG.	ZM.	ZW.	AM.	AZ.	BY.
								TM,										
								NL,										
								NE,					•	•	•	•	•	•
	US	2003	0171	64	•	A1		2003	0123	Ţ,	US 2	001-	8988	85		20	0010	703
	CA	2452	752			A1		2003	0116		CA 2	002-2	2452	752		20	0020	518
	ΑU	20023	32009	98		A1		2003	0121		AU 2	002-	3200	98		20	0020	518
		1427						2004										
		R:	AT,					ES,										
								RO,					,		,		,	,
	JP	2005								-		003-	50983	36		20	0020	518
		20043									_			_		_	00402	
PRIOR												001-						
												002-t			_		0020	

OTHER SOURCE(S):

MARPAT 138:78436

The present invention discloses dye-azide derivs. and their bioconjugates for dual phototherapy of tumors and other lesions. The compds. of the present invention may contain either a mixture of Type 1 (direct energy or electron transfer from photosensitizer to cellular components) and Type 2 (singlet oxygen-mediated therapeutic action) agents or a single entity that integrates both units in the same mols. The compds. are designed to produce both Type 1 and Type 2 phototherapeutic effect at once using dual wavelength light source that will produce singlet oxygen and nitrene at the lesion of interest. This is accomplished using 3 types of formulation: homogenous mixts. of Type 1 and Type 2 agents alone, heterogeneous mixts. of Type 1 and Type 2 agents, or a single mol. entity containing both Type 1 and Type 2 functionalities. Suggested as single mol. entities are dyes (cyanines, porphyrins , phthalocyanines, etc.) conjugated to both organic azides and to biomol. targeting agents such as receptor (somatostatin, steroid, carbohydrate, etc.)-binding mols.

ACCESSION NUMBER: 2000:530976 CAPLUS

DOCUMENT NUMBER: 133:259194

TITLE: Photobleaching studies on azabenzoporphyrins and

related systems: a comparison of the photobleaching of the zinc(II) complexes of the tetrabenzoporphyrin,

5-azadibenzo(b,g)porphyrin and

phthalocyanine systems

AUTHOR(S): Bonnett, Raymond; Martinez, Gabriel

CORPORATE SOURCE: Department of Chemistry, Queen Mary and Westfield

College, London, El 4NS, UK

SOURCE: Journal of Porphyrins and Phthalocyanines (2000),

4(5), 544-550

CODEN: JPPHFZ; ISSN: 1088-4246

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB The kinetics of photobleaching of zinc(II) tetra-tert-

butyltetrabenzoporphyrin (I), zinc(II) 13, 17-diethyl-12,18-dimethyl-5-

azadibenzo[b,g]porphyrin 2 and zinc(II) tetra-tert-

butylphthalocyanine (III) were studied. In methanol containing ca 0.1% pyridine, complex I underwent photoaggregation, II was relatively

photostable, while III underwent a smooth true photobleaching process with loss of intensity across the visible region. Where appropriate, apparent first-order rate consts. for the photodiminution of the α -band in

the spectra were reported, and the effects of solvent variation and of additives were measured. It has not been possible to provide an overall rationalization of the solvent effects, but the effects of additives support the view that the photooxidative processes involve singlet oxygen. Expts. with potassium superoxide did not support superoxide involvement.

Preparative expts with I and III were performed in methanol. In the case of I a large recovery of the starting material was observed, indicating that the photoaggregation did not involve the formation of new covalent bonds. In the case of III gives rise to at least five products (besides the

starting material). Two of these, isolated in low yields (<5%), are identified as a fragmentation (depolymn.) product, 4-tert-butylphthalonitrile, and the expected oxidative product,

4-tert-butylphthalimide. The results are discussed and conclusions drawn. REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:613433 CAPLUS

DOCUMENT NUMBER: 131:336863

TITLE: Approaches to the stepwise synthesis of

benzoporphyrins and phthalocyanines. Part 2: synthesis of a 5-azadibenzo[b,g]porphyrin

from benzopyrromethene intermediates

AUTHOR(S): Bonnett, Raymond; Okolo, Kawulia

CORPORATE SOURCE: Department of Chemistry, Queen Mary and Westfield

College, London, El 4NS, UK

SOURCE: Journal of Porphyrins and Phthalocyanines (1999),

3(6/7), 530-536

CODEN: JPPHFZ; ISSN: 1088-4246

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB An azadibenzoporphyrin, 13,17-diethyl-12,18-dimethyl-5-azadibenzo[b,g] porphyrin, is prepared by a 2 + 2 synthesis from a

1-bromobenzopyrromethene precursor by treatment with sodium azide at 140°C in solvent. Yields depend on solvent, 35% being obtained in quinoline and 84% in DMF. Treatment of 1-bromo-8-ethyl-7,9-

dimethylbenzopyrromethene hydrobromide with sodium azide at

60°C in DMF gives 8-ethyl-7,9-dimethyltetrazolo[1,5-

i]benzopyrromethene which appears to be, or to lead to, an intermediate in the macrocyclization at the higher temperature

REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 9° CAPLUS COPYRIGHT 2006 ACS on STN°

15

ACCESSION NUMBER:

1998:789050 CAPLUS

DOCUMENT NUMBER:

130:20543

TITLE:

Photodynamic and sonodynamic therapy and agents and

system for use therefor

INVENTOR(S):

Iger, Yoni

PATENT ASSIGNEE(S):

Technion Research and Development Foundation Ltd.,

Israel

SOURCE:

LANGUAGE:

PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA:	rent	NO.		•	KIN	D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
	WO	9852	- 610			A1	_	1998	 1126	,	WO 1:	998-:	 IL23	 1		1:	9980	520
		W:	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
								GE,										
								LR,										
								RU,										
								YU,										
		RW:						SD,										
								IT,						-	-			-
			CM,	GA,	GN,	ML,	MR,	NE,	SN,	TD,	TG	•	·	•	•	·	•	•
	CA	2290	450			A1		1998	1126	1	CA 1	998-	2290	450		19	9980	520
	AU	9874	475			À		1998	1211		AU 1	998-	7447	5		19	9980	520
	EP	9830	90			A1		2000	0308		EP 1	998-	9217	07		19	9980	520
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	FI														
RIC	RIT	APP	LN.	INFO	·: '					. /	IL 19	997-:	1208	91	1	A 19	9970	522

PR

WO 1998-IL231. W 19980520

AΒ The present invention provides a method and system for destruction of biol. tissues, such as tumors, by various types of irradiation such as ultrasound or light using a helper agent or combination of agents, optionally together with an agent capable of being sensitized by the irradiation The helper agent may release singlet oxygen, oxidizing compds., free radicals or can be an agent capable of undergoing an exothermal reaction. The present invention further provides a method for terminating the destructive activity of various energy-sensitizable agents. Several examples are provided on reduction of tryptophan fluorescence in the presence of photosensitizable compds. TPPS2, TPPS4 and AlPcS3 after ultrasound irradiation in the presence or absence of oxygen.

REFERENCE COUNT:

14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:171824 CAPLUS

DOCUMENT NUMBER:

128:258678

TITLE:

Azide promotion of alkane oxidations catalyzed by metal complexes in solution

AUTHOR(S):

Lyons, James E.; Ellis, Jr., Paul E.; Shaikh, Shahid

CORPORATE SOURCE:

Sun Company, Research and Development Department,

Marcus Hook, PA, 19061, USA

SOURCE:

Inorganica Chimica Acta (1998), 270(1,2), 162-168

CODEN: ICHAA3; ISSN: 0020-1693

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal LANGUAGE: English

AB The oxidation of light alkanes catalyzed by metal complexes in solution is promoted by Group 1 metal azides. Yields of oxygenated reaction products are greatly enhanced when catalytic amts. of azides are added to the reaction mixture The addition of sodium azide to oxidation catalyzed by transition metal acetylacetonates, heteropolyacids, polyoxometallates, phthalocyanines, bis-

(pyridylimino)isoindolines, porphyrins and Schiff bases

significantly enhances the rate of low-temperature catalytic oxidation reactions in

the liquid phase. Earlier work showed that Cr(III), Mn(III), Fe(III) and Co(III) complexes of electron-deficient macrocyclic complexes exhibited remarkable catalytic activity for oxidizing light alkanes. Such complexes bearing axial azide ligands were far more active than their axial chloride or acetate counterparts.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:406914 CAPLUS

DOCUMENT NUMBER: 127:146217

TITLE: Remarkable functional aspects of myoglobin induced by

diazaheme prosthetic group

AUTHOR(S): Neya, Saburo; Hori, Hiroshi; Imai, Kiyohiro;

Kawamura-Konishi, Yasuko; Suzuki, Haruo; Shiro, Yoshitsugu; Iizuka, Tetsutaro; Funasaki, Noriaki

CORPORATE SOURCE: Department of Physical Chemistry, Kyoto Pharmaceutical

University, Kyoto, 607, Japan

SOURCE: Journal of Biochemistry (Tokyo) (1997), 121(4),

654-660

CODEN: JOBIAO; ISSN: 0021-924X Japanese Biochemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

PUBLISHER:

AB The iron complex of β , δ -diazamesoporphyrin III, a mol. hybrid of porphyrin and phthalocyanine, was incorporated into apomyoglobin to investigate novel biol. aspects of myoglobin. The reconstituted ferric protein forms an internal hemichrome with the iron-bound distal histidine. The reduced ferrous protein has extraordinarily high affinities for O2 and CO. The ferrous myoglobin is capable of strong binding with pyridine, imidazole, cyanide, and azide, and reacts moderately with ammonia. The NO complex exhibited 5-coordinate to 6-coordinate transition over 150 min. The instability of 5-coordinate NO heme is consistent with a high affinity of imidazole to the ferrous heme. The kinetic analyses of the ferrous derivs. suggest the importance of the π orbitals in neutral ligands as well as the neg. charges in anionic ligands. A high affinity of imidazole to ferrous diazaheme accounts for the internal hemichrome formation in ferrous myoglobin containing phthalocyanines.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:461595 CAPLUS

DOCUMENT NUMBER: 119:61595

TITLE: First example of a mixed-ligand bimetallic (Fe-Fe)

N-bridged dimer: (μ-nitrido)[((tetraphenylporphyrin

ato)iron) (phthalocyaninato)iron]

AUTHOR(S): Ercolani, C.; Hewage, S.; Heucher, R.; Rossi, G. CORPORATE SOURCE: Dip. Chim., Univ. Roma "La Sapienza", Rome, Italy

SOURCE: Inorganic Chemistry (1993), 32(13), 2975-7

CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE:

LANGUAGE:

Journal English

AB (TPP)FeNFePc (TPPH2 = tetraphenylporphyrin; PcH2 = phthalocyanine
) was prepared and characterized by elemental anal., TGA, magnetic
susceptibility, and spectral (IR, ESR, Moessbauer) methods. The Fe-N-Fe
moiety is linear and the unpaired electron is essentially localized on the
Fe-N-Fe bond system with significant N atom character.

L1 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1992:233757 CAPLUS

DOCUMENT NUMBER:

116:233757

TITLE:

Fluorophore- polyoxyhydrocarbyl moiety conjugates as

markers for fluorescence immunoassays and other

applications, and preparation of relevant

phthalocyanine and porphyrin

derivatives

INVENTOR(S):

Dandliker, Walter B.; Hsu, Mao Lin

PATENT ASSIGNEE(S): SOURCE:

Diatron Corp., USA PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

	PA?	CENT :	NO.			KINI	D DATE	APPLICATION NO.		DATE
	WO	9118	007			A1	19911128	WO 1991-US3426		19910515
		W:	CA,	FI,	JP,	NO				
		RW:	AT,	BE,	CH,	DE,	DK, ES, FR,	GB, GR, IT, LU, NL,	SE	
	CA	2082	934			A 1	19911116	CA 1991-2082934		19910515 [°]
	CA	2082	934			С	20030805			•
	ΕP	5289	91			A 1	19930303	EP 1991-911322		19910515
	ΕP	5289	91			В1	20010926			
		R:	ΑT,	BE,	CH,	DE,	DK, ES, FR,	GB, GR, IT, LI, LU,	NL,	SE
	JP	0550	7518			${f T}$	19931028	JP 1991-510827		19910515
	ΑT	2061	24			${f T}$	20011015	AT 1991-911322		19910515
	ES	2164	043			тз	20020216	ES 1991-911322		19910515
PRIOR	RIT	APP:	LN.	INFO	.:		•	US 1990-524212	А	19900515
					-			WO 1991-US3426	W	19910515

AB The title fluorescent dyes are free of aggregation and serum binding and are suitable for e.g. fluorescence immunoassays. Thus, a digoxin conjugate of phthalocyanine was prepared from a sulfonated phthalocyanine β -alanine derivative (preparation given) and 3-amino digoxigin. The conjugate was further reacted with PEG Phenol 750. In a test for binding activity to anti-digoxin antibody monitored by transient-state polarized fluorescence, a trace amount of the phthalocyanine-digoxin-PEG Phenol conjugate was dissolved in saline-azide-phosphate buffer containing human serum and antibody. A change of 0.056 in polarization was observed over that in the control with no antibody. Preparation of a variety of porphyrin derivs. is included.

=> d 15 ibib abs hitstr tot

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:42026 CAPLUS

DOCUMENT NUMBER:

138:78436

TITLE:

Dye-azide compounds for dual phototherapy

INVENTOR(S):

Rajagopalan, Raghavan; Achilefu, Samuel I.; Bugaj,

Joseph E.; Dorshow, Richard B.

PATENT ASSIGNEE(S):

Mallinckrodt Inc., USA PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

SOURCE:

Patent English

LANGUAGE:

7m: 'O

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	TENT	ΝО.			KIN	D	DATE			APP:	LICAT	ION 1	NO.		D.	ATE	
	2003 2003									WO .	2002-	US19	187		2	0020	618
	₩:	CO, GM,	CR, HR,	CU, HU,	CZ, ID,	DE, IL,	DK, IN,	DM, IS,	DZ, JP,	EC KE	, BG, , EE, , KG,	ES, KP,	FI, KR,	GB, KZ,	GD, LC,	GE, LK,	GH, LR,
		PL,	PT,	RO,	RU,	SD,		SG,	SI,	SK	, MW, , SL,						
	RW:	KG, GR,	KZ, IE,	MD, IT,	RU, LU,	TJ, MC,	TM, NL,	AT, PT,	BE, SE,	CH TR	, TZ, , CY, , BF,	DE,	DK,	ES,	FI,	FR,	GB,
CA	2003 2452 2002	0171 752	64		A1 A1		2003	0123 0116	,	US :	2001- 2002- 2002-	2452	752		2	0020	618
	1427 R:	712 AT,	BE,	CH,	A2 DE,	DK,	2004	0616 FR,	GB,	EP 2	2002- , IT,	7495	97		2	0020	618
	2004	1614	30						1	US 2 US 2	2003- 2004- 2001- 2002-	77684 89888	10 35	i	2 A 2	0020 0040 0010 0020	211 703

OTHER SOURCE(S): MARPAT 138:78436

AB The present invention discloses dye-azide derivs. and their bioconjugates for dual phototherapy of tumors and other lesions. The compds. of the present invention may contain either a mixture of Type 1 (direct energy or electron transfer from photosensitizer to cellular components) and Type 2 (singlet oxygen-mediated therapeutic action) agents or a single entity that integrates both units in the same mols. The compds. are designed to produce both Type 1 and Type 2 phototherapeutic effect at once using dual wavelength light source that will produce singlet oxygen and nitrene at the lesion of interest. This is accomplished using 3 types of formulation: homogenous mixts. of Type 1 and Type 2 agents alone, heterogeneous mixts. of Type 1 and Type 2 agents, or a single mol. entity containing both Type 1 and Type 2 functionalities. Suggested as single mol. entities are dyes (cyanines, porphyrins, phthalocyanines, etc.) conjugated to both organic azides and to biomol. targeting agents such as receptor (somatostatin, steroid, carbohydrate, etc.)-binding mols.

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=> s 14 not 15
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L6 9 L4 NOT L5

=> d l6 ibib abs hitstr tot

L6 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:451835 CAPLUS

DOCUMENT NUMBER:

115:51835

TITLE:

Synthesis of quinazoline dyes containing azido group

and their application

AUTHOR(S):

Naik, V. R.; Desai, K. R.

CORPORATE SOURCE: SOURCE:

Dep. Chem., South Gujarat Univ., Surat, 395 007, India Journal of the Institution of Chemists (India) (1990),

62(4), 171-2

CODEN: JOICA7; ISSN: 0020-3254

DOCUMENT TYPE: LANGUAGE:

Journal English

GΙ

OH NЗ HN CH = CHNaO3S SO3Na

AB The title dyes I (naphthalene moiety derived from H acid, J acid, Chicago acid, R acid, 1,2,4-acid, or Peri acid or 2-aminophenol or 3-aminophenol), useful for dyeing nylon fibers, are prepared by the coupling of diazotized 2-styryl-(4-dimethylamino)-6-amino-4-oxoquinazoline with the above-named coupling components, followed by reaction of the monoazo intermediates with NaN3. M.ps., but no color data, for all of the prepared dyes are presented. Dyeing apparently takes place by a nitrene mechanism (no data).

ANSWER 2 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1990:581232 CAPLUS

DOCUMENT NUMBER:

113:181232

TITLE:

Mechanism study of deep-UV irradiated poly(methyl

methacrylate) - azide resist system

AUTHOR(S):

Han, C. C.; Corelli, J. C.

CORPORATE SOURCE:

Cent. Integr. Electron., Rensselaer Polytech. Inst.,

Troy, NY, 12180-3590, USA

SOURCE:

Radiation Effects and Defects in Solids (1989),

111-112(1-2), 45-58

CODEN: REDSEI; ISSN: 1042-0150

DOCUMENT TYPE:

Journal

LANGUAGE:

English

The photochem. of resist films of PMMA containing a high concentration (25 weight%) of an

aromatic azide was studied. Both p-azidobenzoic acid (PABA) and 2,6-bis(4-azidylbenzylidene)-4-methylcyclohexanone(2,6-bisazide) were used as the azide compds. Chemical anal. of the photoproducts of deep-UV irradiated PMMA-azide films showed that the products contained unreacted azide compound, primary amine, azo dye, and PMMA with pendant secondary amines formed by nitrene insertion reactions. Formation of secondary amines resulting from nitrene insertion to the PMMA chain is mainly responsible for both the dissoln. rate retardation and the image reversal observed in the exposed PMMA-azide resist.

ANSWER 3 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1980:496660 CAPLUS

DOCUMENT NUMBER:

93:96660

TITLE:

.Studies on the thermal fixation of sulfonylnitrene

reactive dyes on unmodified poly(m-phenylene

isophthalamide)

AUTHOR(S):

Fagbule, M. O.

CORPORATE SOURCE:

Chem. Dep., Univ. Ilorin, Ilorin, Nigeria

SOURCE:

Textilveredlung (1980), 15(5), 172-5

CODEN: TXLVAE; ISSN: 0040-5310

DOCUMENT TYPE:

Journal

LANGUAGE:

German

AB Dyeings fast to washing and dry cleaning are obtained when poly(m-phenyleneisophthalamide) [24938-60-1] fibers dyed with monoazo reactive dyes containing azidosulfonyl groups are dried at low temps. and briefly subjected to dry heat at 180°. The degree of fixation is substantially increased when electron-donating groups are introduced into a position ortho or para to the sulfonylazide group.

L6 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1975:565695 CAPLUS

DOCUMENT NUMBER: 83:165695

TITLE: Dyeing textile fibers

INVENTOR(S): Pullan, Peter J.

PATENT ASSIGNEE(S): Kodak Ltd., UK

SOURCE: Brit., 7 pp.

CODEN: BRXXAA

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1395885	Α	19750529	GB 1971-40109	19720824
PRIORITY APPLN. INFO.:			GB 1971-40109 A	19720824

GI For diagram(s), see printed CA Issue.

AB Acrylic, cellulose acetate, nylon, and polyester fibers were dyed by heating in nonaq. solution with carbene and nitrene radical-generating dyes. Thus, nylon-6,6 was padded with 4.0 g azo dye (I) [56631-69-7] in 100.0 ml DMF and 900.0 ml Cl2C:CCl2, dried at 120°, and thermofixed 2 min at 200° giving a yellow shade of good fastness to light and washing.

L6 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1973:480335 CAPLUS

DOCUMENT NUMBER: 79:80335

TITLE: Dyes containing azidosulfonyl groups

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

Shuttleworth, Leslie
Eastman Kodak Co.
Ger. Offen., 25 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
DE 2252785	A1	19730510	DE 1972-2252785		19721027	
GB 1406996	Α	19750924	GB 1972-26795		19721026	
PRIORITY APPLN. INFO.:			GB 1971-50339	Α	19711029	
			GB 1972-26795	Α	19720608	

Fiber-reactive azidosulfonyl group-containing azo dyes I (R = H, Cl, Rl = substituted phenyl, 6-substituted-2-benzothiazolyl, Q = CONH, NHCO2CH2CH2NMe, NHCONH, NHCO2CH2CH2) and anthraquinone dyes II (R2 = H, NH2, NHMe, R3 = H, Me Ql = -p-NHC6H4CH2CH2O2CNH, NHCH2CH2O2CNH, NHCONH) were prepared and were used to dye polyamide fiber fast shades. Thus, a mixture of 5,2-Me(HO)C6H3NH2 .far. PhNH2 was treated with m-CloCC6H4SO2Cl was refluxed for 30 min and NaN3 was added to give azo dye I (R = H, Rl = 5,2-Me(HO)C6H3, m-SO2N3, Q = CONH) [41117-97-9], fast yellow on polyamide fibers; anthraquinone dye II(R2 = NHMe, R3 = H, Q1 = p-NHC6H4CH2CH2O2CNH, m-SO2N3) [41117-87-7] was prepared from 1- methylamino-4-(4-β-hydroxyethylphenyl)amino anthraquinone and m-N3SO2C6H4NCO. The other I and II were similarly prepared

ANSWER 6 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

78:45020

ACCESSION NUMBER: 1973:45020 CAPLUS

DOCUMENT NUMBER:

TITLE: New fiber-reactive dyes for hydrophobic fibers Griffiths, J.; Fagbule, M.; McDarmaid, R. I. AUTHOR(S): Dep. Colour Chem. Dye., Univ. Leeds, Leeds, UK Textilveredlung (1972), 7(12), 807-10CORPORATE SOURCE:

SOURCE:

CODEN: TXLVAE; ISSN: 0040-5310

DOCUMENT TYPE:

Journal LANGUAGE: English

Azide fiber-reactive dyes (I, R = H, NO2, Me2N, R1 = H or Me, Q = SO2, s-triazinylamino, m = 1 or 2, n = 0 or 1) are applied from a dispersion to polypropylene fibers or films and are photolytically (uv) or thermolytically decomposed to give a nitrene intermediate which reacts with the substrate by an insertion reaction. Photolytic decomposition fixes the dye only on the surface while decomposition at 140.deg. gives a fixation of 26-58%. To obtain high fixation yields, high temperature is needed which is not always possible since it may be above the m.p. of the fiber.

ANSWER 7 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

1973:44975 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 78:44975

Fast azo dyeing of fibers and shaped articles TITLE: INVENTOR(S): Kuroki, Nobuhiko; Komatsu, Kiroku; Tamura, Shuji;

Matsumoto, Hiroyuki

PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd.

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3695821	A	19.721003		19701118
	GB 1294989	Α	19721101		:
	DRITY APPLN. INFO.:			JP 1969-93357 A	
AB	polymeric hydrocard containing a Me, CH using a dye contain decompose the sulfoctovalent bond with sublimation-resistate was treated in a dy 4-[4-(N-methylanili 1.5, and a condensate polyalkylnaphthalen water-washing, the with DMF at room temin at 200.deg., the bleed on Tetron 4.5 (brown change) and high-pressure dyein	ons, check or making a sonyl azionthe fiborath constant dyed resulfon dyed fiborature of a constant dyed fiborature dyed bleeding without fabr	lorinated posethine group ulfonyl azid de to sulfon er, and were fiber. Thu ontaining H2 ylazo]benzen lkylnaphthal ate 0.7 part ber was heat re to yield cloth had als, compared g 1 class fout the heatics were obten et on the summer of the s	ained using anthraquino	r polyesters ere fast-dyed rs were heated to d a yester cloth te 1, 437-30-2] d Na . After and treated . After curing 1 class and 1 class by
	· 2	5		j <u>F</u> .	

ANSWER 8 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1972:541477 CAPLUS

DOCUMENT NUMBER: 77:141477

TITLE: Azo and anthraquinone dyes and fluorescent whiteners for hydrophobic fibers

INVENTOR(S): Griffiths, John PATENT ASSIGNEE(S): Eastman Kodak Co. SOURCE:

Fr. Demande, 16 pp.

CODEN: FRXXBL

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
FR 2083686	A5	19711217	FR 1971-11147		19710330
FR 2083686	B1	19760319			
GB 1344991	Α	19740123	GB 1970-15169		19700331
PRIORITY APPLN. INFO.:			GB 1970-15169	Α	19700331

AB The solvent fastness of 8 azo dyes, an anthraquinone dye, and a fluorescent whitener was improved for polypropylene, cellulose acetate, polyester, and nylon fibers by incorporation of a hydrazide or azide group which can form a nitrene group into mol. structure of the treating agent. Thus, diazotized p-aminobenzenesulfonylazide was mixed with dilute HCl containing PhNEt2 and the resulting solution buffered with

NaOAc to pH 5 to give 87% 4-[4-(diethylamino)phenylazo]benzenesulfonylazid e (I) [36525-77-6] which colored nylon fibers yellow, cellulose acetate fibers red, and Terylene and Kodel polyester fibers orange shades that were fast to boiling iso-PrOH and DMF. Another dye was 1-(butylamino)-4-(2-azidosulfonyl-4-tolylamino)anthraquinone (II) [36525-78-7], and the fluorescent whitener was 3-phenyl-7-[2-azido-4-(diethylamino)-s-triazin-6-ylamino]coumarin (III) [34381-78-7].

ANSWER 9 OF 9 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1972:114802 CAPLUS

DOCUMENT NUMBER:

76:114802

TITLE:

Reactive dyes via nitrene intermediate

AUTHOR(S):

Komatsu, Kiroku; Tamura, Shuji; Kuroki, Nobuhiko

CORPORATE SOURCE:

Fac. Eng., Univ. Osaka Prefect., Sakai, Japan

SOURCE:

Kogyo Kagaku Zasshi (1971), 74(12), 2503-7

CODEN: KGKZA7; ISSN: 0368-5462

DOCUMENT TYPE:

Journal

LANGUAGE:

Japanese

Four reactive azo dyes I (R = H or Cl, R1 = H, OH, or Me, R2 = H, Et2N, or Me2N, R3 = H or Me), a reactive azobenzene dye (II) [34563-92-3], and a reactive naphthylazo dye (III) [2920-03-8] were prepared by coupling of diazotized 4,3-H2N(R)C6H3SO2NHNH2 with the appropriate couplers. Polypropylene (IV) [9003-07-0] and polyester films dyed with the dyes prepared required thermofixation at 150.deg. for 2 hr and at 160.deg. for 1 hr, and the fixation condition was too severe for IV fibers. Polyester fiber dyed with the dyes prepared had good sublimationfastness. Thermolysis of III in isooctane (a model compound for IV) at 140.deg. for 2 hr gave N-isooctyl-p-[(2-hydroxy-1naphthyl)azo]benzenesulfonamide (V, R = isooctyl) [34558-99-1].